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Crucial Times for General Surgery

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"Specialization in general surgery" was the title of an editorial in the *British Journal of Surgery* in 1991, in which Johnson stated: "General surgery has a future, but the future requires increasing sub-specialization." Apparently at that time it was a question of whether or not there *was* a future. How do we see the problem in 1999? Can we look at the issue from a *European* point of view?

Although Europe is united in the EEC, and has one currency, the Euro, since 1999, it is still a collection of different countries, populations, and attitudes. Even small parts of Europe are willing to fight for their identity. Nevertheless, we do have the European Surgical Association (ESA), whose aim is to cultivate and improve the science and art of surgery, and to improve the standards of the surgical medical profession in Europe. So I thought it would be appropriate to ask the ESA members about their ideas concerning the future of general surgery.

We see many changes taking place, inside and outside hospitals, and most of these changes are not initiated by the specialist. More complicated care has to be given in a shorter period of time, with less salary, less autonomy, more bureaucracy, and more part-time specialists—in other words, there is increased workload with fewer incentives.

Some feel that we are spiraling downwards, towards being a second-class profession. They forget that we have one of the most exciting professions, which not only is rewarding in what we are able to achieve with our patients, but is also associated with interesting social and scientific developments.

Our general impression is that there are large differences between countries in the organization of surgical departments and in surgical training. It seems that some elements of surgery, such as vascular surgery and trauma, are completely separated from general surgery in some countries, but not in others. In our united European Community, where doctors may practice in any country, it is not logical that there are wide variations in the structure of surgical departments, nor that surgical training and the length of the training period can be so different. In Holland, the average age of a surgeon beginning his own practice is 37. We realize that we deliver a surgeon who is too old, too wise, and too expensive, with a too-short productive time left in his professional life. A solution would be to admit the candidates earlier and reduce the training period.

In the ESA we regularly hypothesize about developments that may change the future of surgery and, hence, that of the hospital. Yet we do not formally discuss these matters at our meetings. It is not part of the agenda. The problem is that we do not really try to make the future ourselves, to carve our own destiny. At this moment, our future is determined by governments, health insurance companies, and hospital organizations. *We* do not make the rules.

To get more insight into the present situation in Europe, I performed an inquiry among members of the ESA from 14 countries. A total of 39 ESA members sent back the questionnaire. Many gave additional information by means of a letter. The questions in the inquiry were focused on surgical training and the present and future structure of the department of surgery.

Surgical Training

According to the responses, the training of surgical residents starts between the ages of 24 and 30 (average age 26.5). The training period varies between 5 and 10 years (average 6 years). The average age of a surgeon, at the time of appointment to a definite position in a hospital, is 36.8 (age range 30–45). There appears to be an enormous variation in the length of training and the time spent before applying for a definitive hospital position. Do we really think it acceptable that our surgeons start their professional life after the age of 35, or even 40, in a society in which responsibility is increasingly given at a younger age, and the age for retirement is decreasing to around 60 years?

Obviously we should try to attempt to shorten the medical study period and/or the surgical training period in such a way that the surgeon can start his profession in the beginning of his or her thirties. One problem that makes it difficult to bring about such a change is the legal limitation of working hours—now restricted to 46 hours per week in Holland, and there will probably be similar restrictions in the near future in all European countries. We should ask

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ourselves whether it is acceptable that in "our" Europe, surgeons can start their professional career at the age of 30 years in one country and at 45 years in another.

The Structure of the Departments of Surgery

It appears from the inquiry that most departments of surgery still include nearly all the aspects of "general" surgery. Today, vascular, trauma, hepatopancreaticobiliary, oncology, and colorectal surgery are still united in one surgical department in 70% of university hospitals. In the future, it is expected that vascular surgery and trauma in particular will become more and more separated from general surgery. The situation differs in each country; for example, in the United Kingdom, there is no such thing as a large united surgical department.

An increase in daycare-shortstay treatment is expected, from around 32% in 1999 to 52% in the near future. A university surgical department with 50% daycare-shortstay treatments seems far away, yet in Sweden the length of stay in university surgical departments is already less than 5 days. In most countries, the length of admission decreases every year. The reasons may be better surgical care, changes in surgical techniques (*e.g.*, laparoscopy), financial pressures, or a different patient attitude. The length of admission differs widely between countries: in Germany, the mean hospital stay of all hospitalized patients is 12 days, in the United States it is 6.6 days, and in the Netherlands it is 9.9 days.

The question is, what will be the position of a department of surgery in our future hospitals? Governments, hospital directors, and administrators nowadays often favor a hospital structure in which process-oriented treatment teams work together in multidisciplinary policlinical and clinical treatment groups. Departments of surgery and internal medicine decrease in size or disappear completely. There are pros and cons for joining gastrointestinal surgery with gastroenterology, and vascular surgery with radiology, among others. Many ESA members gave arguments for, as well as arguments against. Only 35 answers were explicit enough to conclude that 23 of these would not propose separation from the department of surgery, and 12 would propose separation and amalgamation with other departments. Yet 28 recognized the advantages of separation, and 21 also recognized the disadvantages. There were a few oversimplified remarks or statements: "Surgeons can do all, internists not." "In surgical hands, in better hands." "Try to work with internists (only joking)." "Surgery is nothing without gastrointestinal surgery." Obviously, these remarks come deep from the heart and are a plea to keep surgery together.

One of our German ESA members made the following statement: "Together we have better insight and an improved flow of information." But the full spectrum of surgery leads to better understanding of common surgical problems, better technical skills, and a better intellectual basis for the solution of difficult surgical problems. From England we get the message that there should be close links, but not really combined departments, realizing that completely separate departments of surgery and internal medicine do not help the patient. Our previous president said the following: "I suspect that in 10 years' time there may be no university department of surgery or internal medicine."

A new university hospital in Norway is structured around organ-based units. The experience of the Erasme University Hospital in Brussels is not very encouraging for such a development. Twenty years ago at the Erasme Hospital, a series of integrated medicosurgical units were created, instead of departments of surgery and medicine: gastrointestinal surgery and gastroenterology, a medical and surgical vascular department, for example. This organization failed completely for some units. Although the patients were on the same floor, there was no collaboration between internists and surgeons. It worked for transplantation, dialysis, and vascular disease, because the members of these units were on friendly terms to start with.

There were mixed opinions from Sweden: "Efforts to join internists and surgeons in Sweden were not successful." But another message from Lund was this: "I believe in merging medical and surgical units, as they are based on the needs and expectations of the patients. We work towards organ-based units, for example by merging medical and surgical gastroenterology and endocrinology, or, in other words, the 'guts and glands' unit. We will have 50% of our surgical care in short-stay or ambulatory care, as the mean hospital stay of all patients is at this moment 4.4 days." Another remark from Sweden: "There is no special oncological surgery, and trauma is every man's job. General surgery is more or less dead. Most surgeons do not believe they are general surgeons."

In Switzerland, there is no such a thing as a uniform university department structure. In Basel, they work at horizontal connections in a vertical structure of the hospital in order to create treatment centers, *e.g.*, medical and surgical gastroenterology and vascular surgery together with radiology. Private medicine has made this step much earlier than university departments.

In short, opinions vary widely between countries and within countries. Apparently we feel the need to join forces with the internists, radiologists, and others, but we do not know the best way to achieve this successfully.

These are crucial times for general surgery because of all the changes and restrictions that may overwhelm us. The only way to solve the problem is to take the initiative, to act, instead of reacting repeatedly to the initiatives of others. All it takes is to unite nationally into a strong organization of specialists with political power, and also to act locally with the medical staff in the hospital, in order to influence the decisions made by government and by hospital administration. Management participation is a must.

The national specialist organizations should not make the mistake of focusing primarily on income. Our organization

can gain strength by focusing on *quality of care*. What it requires is an open attitude to new developments, to think and act outside our traditions and surgical kingdoms. We should be able to develop plans for the future framework of the department of surgery. We know that we are moving towards smaller departments with increased daycare, driven by the rapid expansion of laparoscopic surgery combined with changing patient attitudes. We also know that we should not consider ourselves as being the center of care. The patient has this role. The patient has become the center of the medical universe in a Copernican movement. We do realize that one surgeon can no longer take care of all aspects of surgery, nor of all perioperative care. Our medical colleagues have knowledge too, and together we might cure better than each alone. There are many arguments that favor integration of medical and surgical specialists in organ-based units. There are also numerous good arguments to keep surgery together. If we think of a hospital as a vertical structure of departments, we may organize integrated care in so-called horizontal structures. We may link organ-based units horizontally and also in policlinical activities. This has important consequences for the architects of our future hospitals. These horizontal networks may connect different departments to offer complete interdisciplinary knowledge.

These are only a few of the many developments in surgical care that we have to manage by ourselves. We should not let surgery slip out of our hands. We are the main actors in healthcare. We are primarily responsible for the quality of care, and the only ones, apart from our patients, who really care about quality. I would like to call upon the members of the ESA to participate actively in the development of *our* surgery in the 21st century, and to include this in the activities of our association.